

MASS.  
DOCS.  
COLL.

*The Commonwealth of Massachusetts*

---

Annual Report  
OF THE  
Department of Public Utilities  
FOR THE  
Year Ending November 30, 1931  
COMMISSIONERS' REPORT



Publication of this Document approved by the Commission on Administration and Finance

## DEPARTMENT OF PUBLIC UTILITIES

State House, Boston, January 20, 1932.

## ANNUAL REPORT

*To the Honorable Senate and House of Representatives in General Court assembled:*

We respectfully submit the twelfth annual report of the Department of Public Utilities for the fiscal year ended November 30, 1931.

The number of corporations, private and municipal, persons, firms and associations under the jurisdiction of and filing annual returns with the Department is as follows:

Steam railroad companies .....	26
Street railway companies .....	27
Telephone companies .....	17
Telegraph companies .....	5
Steamboat companies .....	3
Sleeping car companies .....	1
Express companies .....	6
Gas companies .....	54
Electric companies .....	56
Water companies .....	52
Motor bus lines .....	73
Municipal lighting plants .....	43
Manufacturing and other companies doing an electric business ..	4
Voluntary associations .....	30
<b>Total .....</b>	<b>397</b>

During the year the Department held 332 formal hearings and many informal hearings or conferences. The following tabulation, showing the number of petitions and complaints filed and the number of investigations made, indicates the volume of work requiring the Department's attention during the fiscal year:

*Petitions:* Railroad, 80; street railway, 48; telephone and telegraph, 2; gas, 29; electric, 34; water, 11; sale of securities (appeals), 12; motor bus lines, 112; sight-seeing lines, 2; total, 330.

*Special Investigations:* Railroad, 1; street railway, 1; telephone and telegraph, 1; gas, 1; motor bus lines, 11; total, 16.

*Applications for Special Permits:* Railroad, 125; street railway, 4; motor bus lines, 2; steamboat, 1; telephone and telegraph, 1; total, 133.

*Complaints:* Railroad, 200; street railway, 45; motor bus lines, 99; telephone and telegraph, 908; gas, 142; electric, 338; water, 18; sale of securities, 1,110; smoke abatement, 278; total, 3,138.

*Tariff or Schedule Filings:* Railroads, freight service, 1,045, passenger service, 333; street railways, 12; express, 55; telephone, 5; telegraph, 3; motor bus lines, 48; electric, 312; gas, 127; water, 5; total, 1,945.

## RAILROADS

Due to the continued depression in business the revenues of the railroads operating in the Commonwealth have been, during the past year, seriously affected. Both The New York, New Haven and Hartford Railroad Company and the Boston and Maine Railroad, as a consequence, have been obliged to suspend the payment of dividends on their common stock. The falling revenues of the railroads have necessitated further economies, and as a result there has been some additional withdrawal of service which the public formerly enjoyed. In petitions for restoration of such service the Department has been compelled to take into consideration the declining revenues of the railroads. It has, however, endeavored to obviate, so far as seemed practicable, any undue inconvenience to the public in the withdrawal of service.

The following table shows the number of persons killed and injured at railroad grade crossings during the past year:

*Accidents at Grade Crossings during the Year ending November 30, 1931*

RAILROADS	PROTECTED CROSSINGS				UNPROTECTED CROSSINGS			
	Num- ber	Killed	In- jured	Ratio of Acci- dents	Num- ber	Killed	In- jured	Ratio of Acci- dents
Boston & Albany .....	64	3	1	1-16	122	-	-	-
Boston & Maine .....	469	6	7	1-36	211	6	2	1-27
Boston, Revere Beach & Lynn .....	11	2	-	1-6	-	-	-	-
Hoosac Tunnel & Wilmington .....	-	-	-	-	2	-	-	-
Central Vermont .....	6	-	-	-	40	-	-	-
New York, New Haven & Hartford.	426	7	6	1-33	286	2	9	1-26
Fore River .....	3	-	-	-	-	-	-	-
Total .....	979	18	14	1-33	661	8	11	1-35

### STREET RAILWAYS

In the effort to effect economy there has been the same trend this year as in the past of the abandonment of street railway mileage. In most cases, service by motor vehicles has been substituted for the street cars. The abandonment of street railway mileage is particularly noticeable in the systems operated by the Eastern Massachusetts Street Railway Company, the Holyoke Street Railway Company, the Springfield Street Railway Company and the Worcester Consolidated Street Railway Company.

The physical condition of our street railways has shown no improvement during the past year. In fact, we are inclined to the opinion that in a majority of the companies there has been an actual deterioration, due to the necessity of practicing strict economy, or due to the belief that it was unwise to make large expenditures in maintenance of lines which probably, in the near future, would be abandoned. Notwithstanding the rigid economies practiced, there has been no increase in the net earnings of the street railways because of the continued decrease in public riding.

### CHARLES STATION

The Charles Station, an elevated station which is being constructed near the junction of Cambridge and Charles streets, in the city of Boston, under authority of chapter 444 of the Acts of 1924, is nearing completion. A contract to use this station was executed by this Department, in behalf of the Commonwealth, with the Boston Elevated Railway Company early last year. By reason of the construction of the traffic circle at the junction of Cambridge and Charles streets, and the improvements on the Charles River Embankment, it became possible to construct this station within the amount provided by the Act.

The Engineering Division of this Department designed, prepared plans and specifications, and is now supervising the construction of the station, which will accommodate four car trains. The station building, housing stairs, toilets and fare collection devices, has cast stone for the exterior and salt glazed and buff brick for the interior. Platforms on steel girders extend 300 feet in a westerly direction from the station building with the exterior walls of copper and the interior walls of Kalamein sheathing. One unusual feature of the station design is the elimination of roof columns.

The station building is located within the new Cambridge street traffic circle and connects with the foot passage subway under the circle. The station has been constructed simultaneously with the street widening and the construction of the traffic circle.

After the plans and specifications were completed bids were asked and the contract was awarded the J. Slotnik Company of Boston. Construction started August 10, 1931, and has progressed steadily despite many difficult construction problems. The driving of piles for the foundation of the station building adjacent to two important City of Boston sewers, and the unknown wharves and sewers that were abandoned many years ago due to filling in of



the river front presented additional problems. The rapid transit trains to and from Cambridge have not been delayed at any time during the erection of new girders, platforms, or the cutting down of the old girders.

The new station is expected to be of great service to those using the hospitals nearby and the recreational facilities of the Charles River basin development. It is expected that the station will be open for public travel about the middle of February.

#### VALUATION OF THE EASTERN MASSACHUSETTS STREET RAILWAY COMPANY

On June 8, 1931, the Senate adopted an order, which directed this department to investigate and determine certain valuations of all the property owned, leased or operated by the Eastern Massachusetts Street Railway Company. A report thereon was made by the department on January 4, 1932.

To determine these valuations it was necessary to make a field inventory which required the temporary employment of seventeen engineers to assist in the field and office work. In addition four inspectors from other divisions of the department assisted in the work.

Field work was started on July 1, 1931, and finished about October 1, 1931, when the work of computing the quantities, applying the prices and estimating the depreciation began. The salaries and expenses of the temporary employees amounted to \$10,351.

#### MOTOR BUS TRANSPORTATION

There are 93 motor bus lines operating in the Commonwealth under certificates of public convenience and necessity granted by the Department, including those operated by street railway companies and by subsidiaries of railroad corporations. This is a decrease of 5 from the number of lines operated during the preceding year. The total number of certificates granted by the Department during the year was 119, issued to 29 different companies mainly for extensions to or changes in existing routes.

During the year chapter 408 of the Acts of 1931, which revised and codified the laws relating to the transportation of passengers for hire by motor vehicles, became effective. This law provides, in addition to other important changes, that no motor vehicle subject to the provisions of said act shall be operated without a permit from the Department and that no person shall drive such a motor vehicle unless licensed by the Department. The Department has, during the fiscal year, issued 1,484 bus permits and 2,937 driver's licenses, for which fees amounting respectively to \$14,840 and \$2,937 have been received.

Chapter 399 of the Acts of 1931, being an act relative to sight-seeing automobiles carrying persons in or from the city of Boston, became effective in July of this year.

#### TELEPHONES

The Telephone and Telegraph Division handled 908 cases that required specific treatment. Having in mind that there has been a reduction in the amount of business handled by the telephone companies, many exchanges were visited by Department inspectors with a view to seeing what service conditions were as regards the number of employees.

There were not as many changes in telephone base rate areas, which carry mileage charges in addition to the regular rates, as there were in previous years and particularly between 1926 and 1931. During that period many extensions of base rate areas were made which brought a very substantial reduction in the total amount of money paid by mileage subscribers. There was much less development of telephone areas owing to reduced business and less community development.

The number of telephone stations of the New England Telephone and Telegraph Company during the past year has shown some decrease from last year in practically every section of the state. In Massachusetts, in 1929, the net gain in stations was 28,515; in 1930, the net gain was 10,068, while for eleven months of 1931, there was a net loss of 3,608.

During the year the Boston Central District of this company was changed from partial to complete dial service.

## GAS, ELECTRIC AND WATER COMPANIES

The electric companies operating in this Commonwealth during the past year made a good showing, as compared with the country as a whole. This was due largely to the general increase in domestic demand which offset the loss in commercial and industrial uses.

The gas companies have fallen off in output to a small extent, some showing a loss of up to 2 per cent while others through extension of mains have more than held their own.

Two new gas plants, at Hyannis and Falmouth, were installed, using Butane Gas which has been in use at Wareham for some time.

Chapter 171, Acts of 1931, provided for examination and approval by the Department of automatic shut off devices to be attached to the intake pipe of gas meters. There were 25 such devices from 13 makers approved.

There were inspected during the year 87,323 gas meters of which 87,310 were sealed; six electric meters were inspected on complaint; 544 gas inspections made, seven meter provers and 105 calorimeter thermometers calibrated. Fees collected amounted to \$22,388.10.

Complaints and inquiries, aggregating 498, regarding service and extensions were also considered.

We submit a list of gas, electric and water companies that have violated the law by failing to file their annual returns within the limit prescribed by law:

### *Gas and Electric Companies*

Adams Gas Light Company  
Amesbury Electric Light Company  
Arlington Gas Light Company  
Fall River Electric Light Company  
Lawrence Gas and Electric Company  
Milford Electric Light and Power Company  
New England Power Company  
North Adams Gas Light Company  
Spencer Gas Company  
Williamstown Gas Company  
The Worcester Electric Light Company  
Worcester Suburban Electric Company

### *Water Companies*

Weston Water Company

### MUNICIPAL LIGHTING PLANTS

We herewith set forth a list of the municipal gas and electric plants which, from reports filed in 1931 for the year 1930, appear to have violated the provisions of the Statute requiring them to reduce their rates, when the plants have earned a profit in excess of the eight per cent allowed by law:

	Per Cent		Per Cent
Belmont .....	11.76	Shrewsbury .....	10.18
Granville .....	9.27	South Hadley .....	8.93
Littleton .....	11.34	Sterling .....	10.44
Marblehead .....	9.12	Wellesley .....	12.47
North Attleborough .....	9.77	West Boylston .....	8.64
Peabody .....	16.74		

### SECURITIES DIVISION

In 1931, a total of 4,915 salesmen and 797 brokers were registered. Fees for such registrations received and paid to the treasurer of the commonwealth amounted to \$49,648. A total of 113 new applications for registration as brokers were allowed and 24 such applications were denied. Including members of firms, the total number denied was 86. A total of 1,271 applications for new registrations as salesmen were allowed and 92 such applications were denied. The sale in this commonwealth, during the year 1931, of securities of corporations, trusts, associations or other bodies having an aggregate par value of \$72,298,000, has been forbidden by the Securities Division. Since the effective date of the Sale of Securities Act (August 26, 1921) up to No-

vember 30, 1931, the proposed sale of securities of corporations, trusts, associations or other bodies, having an aggregate par value of \$2,349,516,644, has been prohibited. Forty-four formal hearings were held by the Commission or by the Director of the division during the past year on complaints arising in connection with sales of securities or the manner in which brokers or salesmen conducted their business. The registration of 14 brokers and 335 salesmen was cancelled on the register by orders of the division. The registration of 20 brokers and 206 salesmen was cancelled pursuant to their request. In connection with the registration of brokers and salesmen under the Act, 1562 investigations were made.

#### DIVISION OF SMOKE INSPECTION

Chapter 412 of the Acts of 1930, which provides for the approval by the Director of the Division of Smoke Inspection of all plans and specifications of new power plants, blast furnaces, incinerators, and all heating plants designed to heat one or more buildings having a floor area above the basement in excess of 5000 square feet, all new chimneys connected with any such plant and all substantial reconstruction of such plants in so far as they affect the emission of smoke, became effective January 1, 1931.

The personnel to carry out the engineering details and the plant inspection for this work was composed of the men in the Smoke Inspection force who were best equipped for that type of work. At present, this arm of the Division consists of one engineer, one assistant engineer, two plant inspectors, and one stenographer. More than 700 plans and specifications were submitted during the first eleven months of 1931. Rules and regulations governing setting heights on boilers and approval of types of stokers and other smoke abatement devices were determined after submission to the Advisory Board for their approval.

We are informed by the Division that it has received general cooperation from those who have had smoke problems, and that many former violators have substituted anthracite coal or coke in place of the bituminous coal formerly used in their boilers that were designed to burn only anthracite coal, and this, together with the increased use of central heating in many downtown buildings, has resulted in a material reduction in the amount of smoke in the district.

The headquarters of the Division of Smoke Inspection is on the twenty-third floor of the United Shoe Machinery Building at 140 Federal Street, Boston, and gives an unobstructed view of almost all the stacks in the entire metropolitan district. In addition to the field force of inspectors a constant watch is kept upon the offending chimneys from the windows.

There were 89 hearings held during the year and 16 orders issued. Two court cases were heard.

Total observations on stationary stacks .....	176,515
Total violations .....	1,266
Total observations on locomotives .....	42,943
Total violations .....	59
Total marine observations .....	3,370
Total violations .....	98
Total number of applications filed .....	422
Permits refused .....	5
Applications resubmitted .....	4
Permits issued .....	407
Applications pending .....	4
Certificates issued .....	347
Certificates issued:	
For new power plants .....	8
For new heating plants .....	51
For new stokers .....	66
For new heavy oil burners .....	23
For new light oil burners .....	97
For new incinerators .....	52
Changed to smokeless fuel .....	139
Plant inspections .....	1,281
Cases investigated .....	331



## CAPITAL STOCK AND BONDS

Twenty-seven applications for approval of an issue of stock, bonds or notes have been decided during the year which ended November 30, 1931. The par value of the securities asked for was \$15,240,425 and the par value of the amount approved was \$14,519,000.

The following table shows the securities approved by the Commission for the several companies applying therefor, giving both the par value of the capital stock and the issue price thereof, determined as required by law:

COMPANY	CAPITAL STOCK APPROVED			Bonds approved at Par	Date
	Amount at Par	Issue Price	Value at Issue Price		
Attleboro Gas Light Company Corporation	\$29,000	\$150.00	\$43,500	-	Mar. 20
Barnstable County Gas Company	48,750	25.00	48,750	-	Oct. 19
Barnstable Water Company	-	-	-	\$110,000	July 2
Boston Consolidated Gas Company	6,500,000	100.00	6,500,000	-	June 26
Boston Consolidated Gas Company <sup>1</sup>	850,000	100.00	850,000	-	Dec. 30
Buzzards Bay Gas Company	100,000	25.00	100,000	-	Oct. 19
Eastern Massachusetts Electric Co.	852,600	35.00	1,193,640	-	Nov. 2
East Northfield Water Company	5,000	100.00	5,000	-	June 26
Edison Electric Illuminating Company of Brockton	484,200	40.00	774,720	-	June 30
Greenfield Electric Light and Power Company	340,000	125.00	425,000	-	May 8
Interstate Street Railway Company	-	-	-	50,000	June 16
Lawrence Gas and Electric Company	550,000	45.00	990,000	-	Feb. 18
Lee Electric Company	60,000	150.00	90,000	-	April 6
Lenox Water Company	-	-	-	81,000	June 30
Lexington Gas Company	81,500	100.00	81,500	-	July 31
Lynn Gas and Electric Company	585,000	75.00	1,755,000	-	Dec. 19
Milford Electric Light and Power Company	137,500	300.00	412,500	-	Sept. 18
Northampton Electric Lighting Company	59,000	600.00	354,000	-	Sept. 29
Northampton Gas Light Company	163,775	55.00	360,305	-	Jan. 16
North Shore Gas Company	150,000	25.00	150,000	-	Oct. 30
Old Colony Gas Company	100,000	25.00	100,000	-	Mar. 13
Pittsfield Electric Company	400,000	175.00	700,000	-	Dec. 31
Old Colony Gas Company	-	-	-	590,000	Nov. 16
Randolph & Holbrook Power & Electric Company	8,750	27.50	9,625	-	Jan. 19
United Electric Light Company	320,000	70.00	896,000	-	July 2
United Ticker Service Company <sup>2</sup>	50,000	100.00	50,000	-	July 30
Webster & Southbridge Gas & Electric Company	203,125	40.00	325,000	-	Nov. 12
Woburn Gas Light Company	109,800	100.00	109,800	-	July 31
Worcester Gas Light Company <sup>3</sup>	1,500,000	100.00	1,500,000	-	Feb. 26

<sup>1</sup> To be used to purchase Charlestown Gas and Electric Company.

<sup>2</sup> To purchase from the United Telegram Company all its equipment and property.

<sup>3</sup> Preferred 6 per cent Cumulative stock, to purchase West Boston Gas Company.

## RECOMMENDATIONS FOR LEGISLATION

Since the acquisition of the control of many of our gas and electric companies by so-called holding companies instances have come to our attention of operating companies lending money to other operating and holding companies. If such loans are restricted to that amount of cash which the lending operating company would otherwise properly distribute in dividends, the interests of the consumers would not be adversely affected. On the other hand, gas and electric companies are organized to manufacture and sell gas and electricity and not to engage in the business of lending money. We believe that the lending of money in the way it has been done is beyond the corporate powers of the companies so lending and might properly be attacked by a stockholder. Where a holding company has acquired most of the stock of an operating company, it can be used as a device to force the sale of the stock not owned by the holding company to it, largely upon its own terms. By not declaring dividends and lending its profits to other utilities controlled by it, a powerful influence is brought to bear upon the holders of small amounts of stock to sell their holdings.

We believe that gas and electric companies should be prohibited from lending money, other than advances to their own employees, to a limited amount, unless approved by the Department. We submit a bill, marked "A," to carry this recommendation into effect.

Beginning with 1894, the Legislature has passed successive acts providing for the burying of wires in the city of Boston. Other acts have been passed providing for the burying of wires in limited areas in other communities. The object of placing wires underground is primarily one of public safety, and thus, logically, the overhead wires should first be removed in the densely settled sections of the community. Where the wires are buried in the densely settled portions of a community there is ordinarily no objection by abutters. The company carries its conduits on the abutter's property to a point two feet from the street line, without charge to him, and thus he is only called upon to adjust his internal wiring to the new connection, as in the densely settled portions of the community the buildings usually are built to the line of the street. Where wires are placed underground in the less densely settled portions of the community it is largely because of aesthetic reasons. Such burying often imposes serious expense upon the abutters, as they are called upon to pay for the cost of construction of conduits from two feet inside the street line to their houses, which usually are set back from the street, and, in addition, for the cost of rearranging the internal wiring. This often arouses great indignation upon the part of some of the customers, as they have had no notice of the proposed change from overhead service to underground service until they are informed that they must pay the cost of the conduits from a point two feet inside their premises from the street line to their houses or they cannot be served. They naturally argue that they are satisfied with the overhead service, and that if the change is to be made the entire cost should be borne by the company. We think it obvious that this would be unjust to the other customers of the company, as the cost to the company would be reflected in their rates and they receive little, if any, benefit from the change. Moreover, it is not desirable that the company should have large amounts of capitalizable property, which cannot readily be removed, located on private property which it does not own.

Our attention has been called to the fact that some companies enter into arrangements with local authorities to bury wires without being required to do so by law, and without any notice or hearing being given to those who are affected. We believe that the time has come when provision should be made that the selectmen in towns and the boards of aldermen in cities may require the burying of wires, after notice to the persons assessed as owners of real estate abutting on the street in which it is proposed to place the wires underground, and a public hearing thereon. To protect the abutters and the company from possible unwise and improvident action on the part of the local authorities, we think an appeal should lie, on application of an abutter or the company from the action of the local authorities, to the Department. We present a bill to carry this recommendation into effect, marked "B".

"A"

#### AN ACT TO PROHIBIT THE LENDING OF MONEY BY GAS AND ELECTRIC COMPANIES

*Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:*

*Section 1.* Chapter one hundred and sixty-four of the General Laws is hereby amended by inserting after section seventeen the following new section:—*Section 17A.* No gas or electric company shall loan its funds except to its employees and then only to an amount not exceeding one thousand dollars to any one employee, unless approved in writing by the department. A director, treasurer or other officer or agent of a gas or electric company who makes a loan or votes to authorize a loan in violation of this section shall be punished by a fine of not more than one thousand dollars or by imprisonment for not more than one year, or both.



## "B"

## AN ACT RELATIVE TO THE PLACING UNDERGROUND OF CERTAIN WIRES

*Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:*

*Section 1.* Chapter one hundred sixty-six of the General Laws is hereby amended by inserting after section twenty-eight the following new section:—  
*Section 28A.* The board of aldermen in a city or the selectmen in a town, after a public hearing and written notice of the time and place of such hearing, mailed at least seven days prior thereto by the clerk of the city or by the selectmen of the town to all owners of real estate abutting upon that part of a way upon, along or across which wires for the transmission of electricity or intelligence are constructed and maintained, as such ownership is determined by the last preceding assessment of taxation, may order the person or corporation maintaining the wires to place them under the way, in such manner as the board of aldermen or selectmen shall determine. Any person aggrieved by any decision of the aldermen or selectmen hereunder may, within thirty days after notice of said decision, appeal therefrom to the department of public utilities, which shall thereupon give notice and hear all parties interested, and its decision shall be final.

Respectfully submitted,

HENRY C. ATTWILL,  
EVERETT E. STONE,  
HENRY G. WELLS,  
LEONARD F. HARDY,  
LEWIS GOLDBERG,

*Commissioners.*







